



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/717,066 | 11/19/2003 | Allan S. Deutsch | ESSEN 3.0-020 | 7245 |
| 530 | 7590 | 04/19/2005 | EXAMINER | |
| LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090 | | | O'CONNOR, CARY E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3732 | |

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/717,066 | DEUTSCH | |
| | Examiner | Art Unit | |
| | Cary E. O'Connor | 3732 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>111903</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vlock (4,345,899) in view of Strong et al (2002/0172923). Vlock shows an endodontic instrument comprising an elongated shaft 16 having an upper end and a lower end, a cutting head located along the shaft adjacent the lower end, wherein the cutting head has a cutting surface 12. The instrument of Vlock does not have a stop permanently fixed to the shaft at a distance between 6-8 mm from the lower end but does include a depth marking 20 located about 6mm from the lower end. Strong shows a drill system which includes a rigid depth stop 15 permanently fixed to the shaft. It would have been obvious to one of ordinary skill in the art to provide the instrument of Vlock with a permanently attached stop on the shaft, in view of Strong, in order to prevent drilling deeper than required and prevent the stop from being dislocated on the shaft. As to claims 2-4, Vlock discloses the claimed invention except for the specific distances claimed by applicant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the stop at the distances claimed by applicant, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205

USPQ 215 (CCPA 1980). As to claim 5, note the pointed tip 11 of Vlock. As to claim 13, the stop of Strong is circular. As to claim 14, Strong discloses the claimed invention except for the stop having a polygonal shape. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the stop with a polygonal shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a forming edge in the heating portion or clamp. In re Dailey and Eilers, 149 USPQ 47 (1966).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vlock (4,345,899) in view of Strong et al (2002/0172923) as applied to claim 1 above, and further in view of Peltier et al (5,429,504). The stop of Strong is not located in an annular groove in the shaft. Peltier shows a drilling instrument having an annular groove on shank and a stop secured in the groove. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the shank and stop of the instrument of Vlock and Strong, as taught by Peltier, so that the drilling distance can be adjusted.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vlock (4,345,899) in view of Strong et al (2002/0172923) as applied to claim 1 above, and further in view of Cohen et al (6,042,376). The instrument of Vlock does not have a cutting head having an annular cutting surface extending about a first circumferential portion of the cutting head and a flat non-cutting surface extending about a second circumferential portion of the cutting head. Cohen shows a endodontic instrument

wherein the cutting head 110 has an annular cutting surface 120 extending about a first circumferential portion of the cutting head and a flat non-cutting surface 140 extending about a second circumferential portion of the cutting head to decrease stress to the tooth (column 4, lines 15-17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the cutting head of Vlock, as taught by Cohen, in order to decrease stress to the tooth.

Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vlock (4,345,899) in view of Strong et al (2002/0172923) and Cohen et al (6,042,376). Vlock shows an endodontic instrument comprising an elongated shaft 16 having an upper end and a lower end, a cutting head located along the shaft adjacent the lower end, wherein the cutting head has a cutting surface 12. The instrument of Vlock does not have a stop permanently fixed to the shaft at a distance between 6-8 mm from the lower end but does include a depth marking 20 located about 6mm from the lower end. Strong shows a drill system which includes a rigid depth stop 15 permanently fixed to the shaft. It would have been obvious to one of ordinary skill in the art to provide the instrument of Vlock with a permanently attached stop on the shaft, in view of Strong, in order to prevent drilling deeper than required and prevent the stop from being dislocated on the shaft. Also, the instrument of Vlock does not have a cutting head having an annular cutting surface extending about a first circumferential portion of the cutting head and a flat non-cutting surface extending about a second circumferential portion of the cutting head. Cohen shows a endodontic instrument wherein the cutting head 110 has an annular cutting surface 120 extending about a first circumferential portion of the

cutting head and a flat non-cutting surface 140 extending about a second circumferential portion of the cutting head to decrease stress to the tooth (column 4, lines 15-17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the cutting head of Vlock, as taught by Cohen, in order to decrease stress to the tooth. As to claims 17-19, Vlock discloses the claimed invention except for the specific distances claimed by applicant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the stop at the distances claimed by applicant, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). As to claim 20, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vlock (4,345,899) in view of Strong et al (2002/0172923) and Cohen et al (6,042,376) as applied to claim 15 above, and further in view of Peltier et al (5,429,504). The stop of Strong is not located in an annular groove in the shaft. Peltier shows a drilling instrument having an annular groove on shank and a stop secured in the groove. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to form the shank and stop of the instrument of Vlock, Strong and Cohen, as taught by Peltier, so that the drilling distance can be adjusted.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cary E. O'Connor
Primary Examiner
Art Unit 3732